

**Amendments to the Claims:**

This listing of the claims will replace all prior versions and listings of claims in this application.

**Listing of Claims:**

**24. (Currently Amended)** A head end network system, comprising:

a head end configured to process a plurality of digital data said digital data comprising digital video, internet data, and telephony data;

a composite wideband RF channel configured to communicate a quadrature amplitude modulation (QAM) output ~~head end output to a plurality of set-top boxes,~~ said composite wideband channel comprising including,

a plurality of analog channels,

a plurality of modulated digital channels within each of said plurality of analog channels;

a plurality of head end encoders housed within said head end wherein each head end encoder comprises a QAM modulator for generating said QAM output,

each of said plurality of head end encoders configured to receive said plurality of digital data, which is formatted as Ethernet data with internet protocol that is converted to a MPEG-2 bit stream that is modulated by said QAM modulator; ~~having a first protocol and convert said plurality of digital data to a second protocol;~~

~~each of said plurality of head end encoders configured to generate said plurality of modulated digital channels with said plurality of digital data having said second protocol;~~

~~each of said plurality of head end encoders having an encoder output which occupies one of said plurality of analog channels; and~~

an addressable controller configured to specify a head end encoder that generates the MPEG-2 bit stream that is modulated by said QAM modulator; and

a signal combiner operatively coupled to each of said plurality of head end encoders, said signal combiner configured to stack each said encoder output to generate said composite wideband signal.

**25. (Cancelled).**

**26. (Cancelled).**

**27. (Cancelled).**

**28. (Currently Amended).** The head end network system of claim 24 further comprising a return path demodulator which receives upstream information and communicates said upstream information to said addressable controller. ~~from said plurality of set-top boxes.~~

**29. (Cancelled).**

**30. (Previously Submitted)** The head end network system of claim 29 further comprising a plurality of content servers in communication with said content title server, said content servers having a plurality of video content formatted as said plurality of digital data.

**31. (Cancelled).**

**32. (Cancelled).**

**33. (Cancelled).**

**34. (Currently Amended)** A head end network system, comprising:

a head end configured to process a plurality of digital data, said digital data comprising digital video, internet data, and telephony data;

a composite wideband RF channel configured to communicate a quadrature amplitude modulation (QAM) output ~~head end output to a plurality of set-top boxes,~~ said composite wideband channel comprising, including,

a plurality of analog channels,

a plurality of modulated digital channels within each of said plurality of analog channels,

a plurality of head end encoders housed within said head end wherein each head end encoder comprises a QAM modulator for generating said QAM output,

each of said plurality of head end encoders configured to receive said plurality of digital data, which is formatted as Ethernet data with internet protocol that is converted to a MPEG-2 bit stream that is modulated by said QAM modulator; ~~having a first protocol and covert said plurality of digital data to a second protocol;~~

~~each of said plurality of head end encoders configured to generate said plurality of modulated digital channel with said plurality of digital data having a second protocol;~~

~~each of said plurality of head end encoders having an encoder output which occupies one of said plurality of analog channels;~~

an addressable controller configured to specify a head end encoder that generates the MPEG-2 bit stream that is modulated by said QAM modulator;

a signal combiner operatively coupled to each of said plurality of head end encoders, said signal combiner configured to stack each said encoder output to generate said composite wideband signal;

a return path demodulator configured to receive ~~which receives~~ upstream information and communicate said upstream information to said addressable controller ~~from said plurality of set-top boxes;~~ and

a content title server operatively coupled to said return path demodulator, said content title server configured to provide orientation for selected content ~~selected by one of said plurality of set top boxes.~~

**35. (Previously Submitted)** The head end network system of claim 34 further comprising a plurality of content servers in communication with said content title server, said content servers having a plurality of video content formatted as said plurality of digital data.

**36. (Cancelled).**

**37. (Cancelled).**

**38. (Cancelled).**

**39. (Cancelled).**

**40. (Cancelled).**

**41. (Cancelled).**

**42. (Currently Amended)** A head end network system, comprising:

- a head end configured to process a plurality of digital data,
- a composite wideband RF channel configured to communicate a head end output to a plurality of set-top boxes, said composite wideband channel including,
  - a plurality of analog channels,
  - a plurality of modulated digital channels within each of said plurality of analog channels;
  - a plurality of head end encoders housed within said head end wherein each head end encoder comprises a QAM modulator for generating said QAM modulator;
  - each of said plurality of head end encoders configured to receive said plurality of digital data, which is formatted as Ethernet data with internet protocol that is converted to a MPEG-2 bit stream that is modulated by said QAM modulator; ~~having an internet protocol and convert said plurality of digital data to a MPEG protocol;~~
  - ~~each of said plurality of head end encoders configured to generate said plurality of modulated digital channels with said plurality of digital data having said MPEG protocol;~~
  - ~~each of said plurality of head encoders having an encoder output which occupies one of said plurality of analog channels;~~
  - an addressable controller configured to specify a head end encoder that generates the MPEG-2 bit stream that is modulated by said QAM modulator;
  - a signal combiner operatively coupled to each of said plurality of head end encoders, said signal combiner configured to stack each said encoder output to generate said composite wideband signal;
  - a return path demodulator configured to receive ~~which receives~~ upstream information and communicate said upstream information to said addressable controller; ~~and from said plurality of set-top boxes; and~~
  - a content title server operatively coupled to said return path demodulator, said content title server configured to provide orientation for content selected by one of said plurality of set top boxes.

**43. (Previously Submitted)** The head end network system of claim 42 further comprising a plurality of content servers in communication with said content title server, said content servers having a plurality of video content formatted as said plurality of digital data.

**44. (Previously Submitted)** The head end network system of claim 42 wherein said plurality of digital data comprises digital video.

**45. (Previously Submitted)** The head end network system of claim 44 wherein said plurality of digital data comprises internet data.

**46. (Previously Submitted)** The head end network system of claim 45 wherein said plurality of digital data comprises telephony data.